

MODULE 3



FIELD OPERATIONS

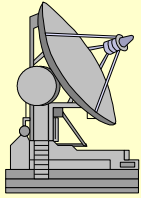
3.1

**DEPLOYMENT
PREPARATION**

3.2

**SETUP &
TEARDOWN**

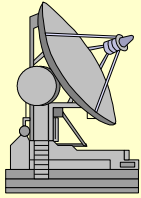
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LESSON 3.1



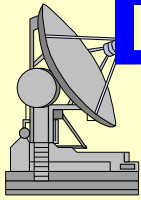
DEPLOYMENT PREPARATION



DEPLOYMENT PREPARATION OVERVIEW



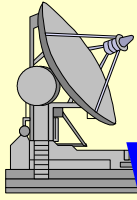
- Warning and Cautions
- Site Selection
- Systems Checkout and Inventory
- Support Items Required
- Task Relationships



DEPLOYMENT PREPARATION OBJECTIVES



- The student will be able to
 - Identify Warning and Caution indicators in the system documentation and equipment
 - Understand proper safety precautions
 - Understand proper security procedures
 - Prepare for deployment of STT
 - Know parameters for choosing a suitable site location
 - List the support items required for deployment.
 - Explain the 2-person task flow for setting up “operator position and antennas” equipment



WARNINGS AND CAUTIONS

- The STT Systems Manual and STT Computer System Operations Manual (CSOM) each contain a Warnings and Cautions section. Additional Warnings, Cautions, and Notes are included with the main body of each manual as well.

WARNING

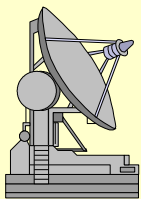
Highlights an operating or maintenance procedure, practice, condition, statement, etc., that, when not strictly observed, could result in injury to or death of personnel.

CAUTION

Highlights an operating or maintenance procedure, practice, condition, statement, etc., that, when not strictly observed, could result in damage to, or destruction of, equipment or loss of mission effectiveness.

NOTE

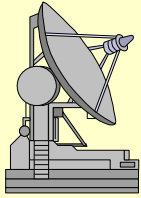
Highlights an essential operating or maintenance procedure, condition, or statement.



SAFETY

- Working Around Electrical Equipment
- Lifting
- Inclement Weather Conditions
- Overhead Obstructions
- Jewelry
- Tripping Hazards

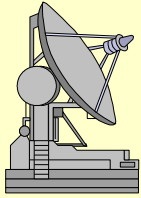




SECURITY

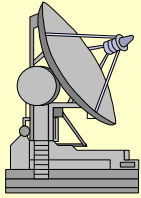


- Implement proper security procedures when the STT is connected to a network
- Adhere to all security requirements
 - Physical
 - Protection of Classified Material



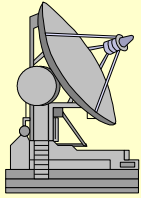
SITE SELECTION (pt 1 of 2)

- Space Requirements
 - Operator Position 10' X 7'
 - Antenna Field 30' X 30'
 - » Free of overhead obstructions
 - » Power Lines
 - » Trees
 - » Within 10 degrees of level
 - » Free of External Electronic Interference (anything transmitting > 5 watts)
 - Network connectivity within 300 Ft



SITE SELECTION (pt 2 of 2)

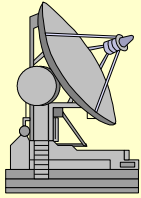
- Power source 110 or 220 VAC available within 100 Ft
- Free of flooding
- Away from heavy vehicle traffic
- Antennas Horizon to Horizon Look angle if Possible



EQUIPMENT CHECKOUT AND INVENTORY



- Conduct Complete Systems Inventory and Serviceability Checks
 - STT Cases
 - Technical Manuals
 - COMSEC
 - DTDs (Keyed)
 - STT Pre-configured (Satellite & System Admin)
 - Unique sys config files, and current system software

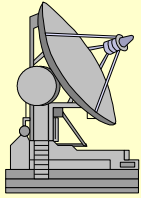


SUPPORT EQUIPMENT INVENTORY (pt 1 of 3)



■ TOOLS

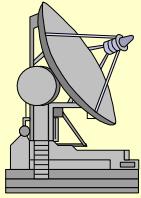
- Entrenching Tool with Case
- Canon Plug Pliers (Teflon coated)
- Screw Driver Flat Tip 1/8 X 4"
- Screw Driver Phillips # 2 Tip



SUPPORT EQUIPMENT INVENTORY (pt 2 of 3)



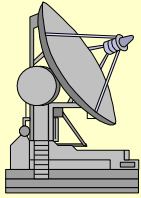
- Shelter or Tent
- 1 table minimum 30" X 60" (STT)
- Comm Cables, Power accessories
 - Network cable with connectors (Type and length to be determined by comm architecture)
 - Transceiver Box (2 ea) (Type determined by comm architecture)
 - T-connector (2 ea)
 - 50-ohm terminator (2ea)
 - Six outlet power strip (2 ea)
 - 100 ft outdoor extension cord



SUPPORT EQUIPMENT INVENTORY (pt 3 of 3)



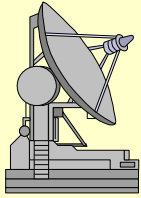
- Uninterruptible Power Supply (UPS), recommended but not supplied
- Safety Equipment (Recommended)
 - Gloves
 - Steel-Toe Boots
 - Common Sense



CONSUMABLES INVENTORY (pt 1 of 2)



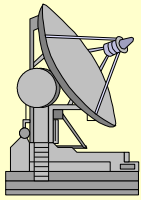
- Alcohol Denatured
- Cotton Swabs
- Paper Towels
- Soft Detergent
- Printer Paper
- Bond Paper
- Data Grade Digital Audio Tapes, 4mm



CONSUMABLES INVENTORY (pt 2 of 2)



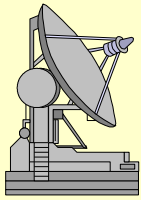
- DAT Drive head cleaning kit
- Floppy Disk, 3.5" 1.4 MB
- Anti-Static Screen cleaning kit
- CD-ROM cleaning kit
- Sandbags (12 minimum)



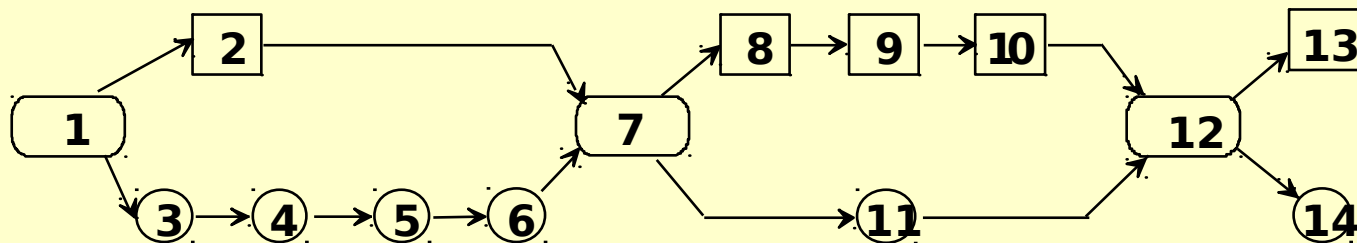
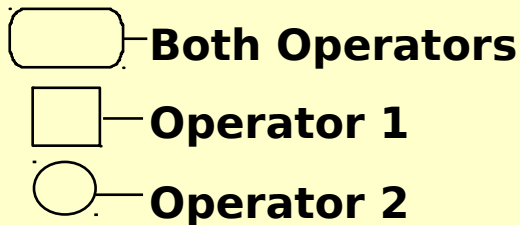
OPERATOR TASK FLOW



- The setup and tear down of the STT system is a minimum two-person operation.
- The task flow supports the setup and tear down of Operator Position and Antenna site equipment with the two person minimum.
 - Operator Position Equipment
 - » DAS, Workstation, Peripheral Bay (L-STT Only), Mouse, AC Power Distribution, Decryption Units, Printer, CD-ROM, Monitor (Enhanced STT Only), LCD Panel (L-STT Only), Keyboard, DAT (Enhanced STT Only)
 - Antenna Site
 - » Antennas, Power Source



OPERATOR TASK FLOW EXAMPLE - BASIC SETUP



1 - Position Transit Cases

2 - Setup Operator Position

3 - Setup Power Source

4 - Setup GPS

5 - Setup APT Antenna

6 - Setup 2' Tracking Antenna

7 - Setup WEFAX Antenna

8 - Apply Power to Equipment

9 - Perform System Configuration

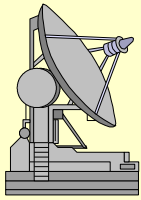
10 - Perform AN/TMQ-43 User Functions

11 - Align WEFAX Antenna

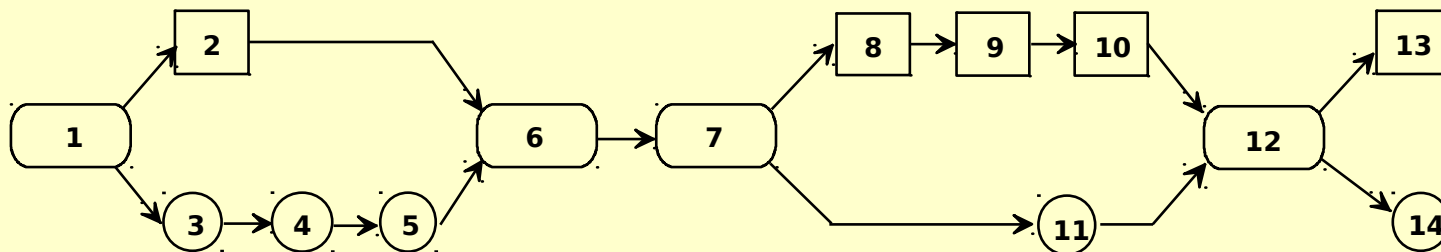
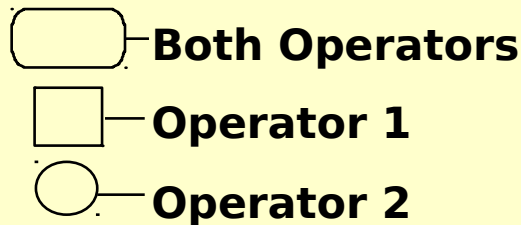
12 - Align 2 FT Tracking Antenna

13 - Load MYK-7A Keys

14 - Store Signal Monitor

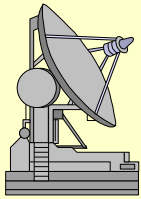


OPERATOR TASK FLOW - ENHANCED SETUP

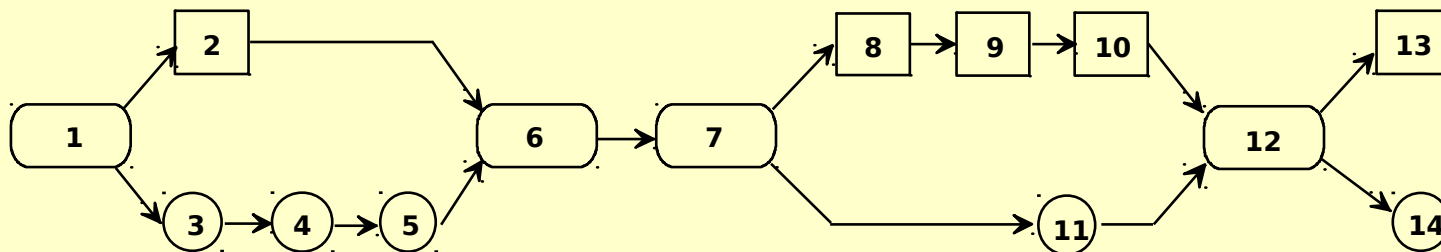
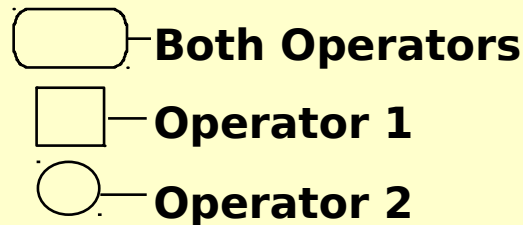


- 1 - Position Transit Cases**
- 2 - Setup Operator Position**
- 3 - Setup Power Source**
- 4 - Setup GPS**
- 5 - Setup APT Antenna**
- 6 - Setup WEFAX Antenna**
- 7 - Setup 4.6 FT Tracking Antenna**

- 8 - Apply Power to Equipment**
- 9 - Perform System Configuration**
- 10 - Perform AN/TMQ-43 User Functions**
- 11 - Align WEFAX Antenna**
- 12 - Align 4.6 FT Tracking Antenna**
- 13 - Load Crypto Keys**
- 14 - Store Signal Monitor**

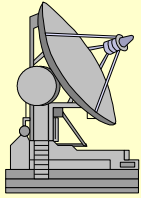


OPERATOR TASK FLOW - L-STT SETUP



- 1 - Position Transit Cases**
- 2 - Setup Operator Position**
- 3 - Setup Power Source**
- 4 - Setup GPS**
- 5 - Setup APT Antenna**
- 6 - Setup WEFAX Antenna**
- 7 - Setup 3 FT Tracking Antenna**

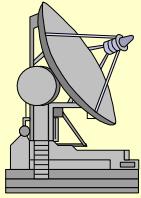
- 8 - Apply Power to Equipment**
- 9 - Perform STT System Configuration**
- 10 - Perform STT User Functions**
- 11 - Align WEFAX Antenna**
- 12 - Align 3 FT Tracking Antenna**
- 13 - Load Crypto Keys**
- 14 - Store Signal Monitor**



LESSON 3.2



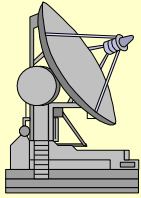
STT SETUP & TEARDOWN



SETUP & TEARDOWN OVERVIEW



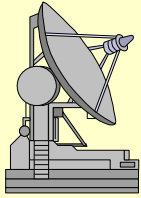
- This lesson topic will cover setup and teardown steps for STT
 - Warnings and Cautions
 - Set-up STT Video/Demonstration
 - Set-up STT
 - Teardown STT system



STT SETUP /TEARDOWN OBJECTIVES

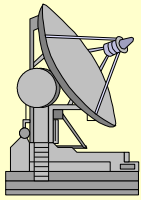


- The student, as a member of a deployable weather team, will be able to:
 - Setup and teardown systems IAW System Manual
 - Setup and teardown the operator position IAW System Manual
 - Setup and teardown the antennas IAW System Manual
 - Connect and disconnect power cables to equipment components IAW System Manual



WARNINGS AND CAUTIONS

- Students must note and adhere to all warnings and cautions in the System Manual
- Failure to comply could result in serious injury or damage to equipment



SET-UP AND TEARDOWN TRAINING PROCESS



- **View Setup Video**
- **Demonstration/Performance**
 - Conduct Setup IAW System Manual
 - » 1 team do operator Position and 1 team do antennas
 - Conduct Teardown
 - » Same team do operator Position and same team do antennas
 - Reverse teams and redo setup/teardown
- **Performance Practice**
 - Teams practice
 - Instructor Assists
- **Evaluation**
 - Teams conduct timed set-up and teardown
 - Instructor intervention only to avoid equipment damage/safety violations